

Title (en)  
HIERARCHICAL NEURAL NETWORK DEVICE, LEARNING METHOD FOR DETERMINATION DEVICE, AND DETERMINATION METHOD

Title (de)  
HIERARCHISCHE NEURONALE NETZWERKVORRICHTUNG, LERNVERFAHREN FÜR DEFINITIONSVORRICHTUNG UND DEFINITIONSVERFAHREN

Title (fr)  
DISPOSITIF RÉSEAU NEURONAL HIÉRARCHIQUE, PROCÉDÉ D'APPRENTISSAGE POUR DISPOSITIF DE DÉTERMINATION, ET PROCÉDÉ DE DÉTERMINATION

Publication  
**EP 3089081 A4 20170920 (EN)**

Application  
**EP 14882049 A 20140210**

Priority  
JP 2014053056 W 20140210

Abstract (en)  
[origin: EP3089081A1] Generating loosely coupled parts by forming couplings between partial nodes in a hierarchical neural network in accordance with a check matrix of an error correcting code.

IPC 8 full level  
**G06N 3/04** (2006.01)

CPC (source: EP KR US)  
**G06N 3/04** (2013.01 - US); **G06N 3/045** (2023.01 - EP KR US); **G06N 3/08** (2013.01 - KR US)

Citation (search report)

- [I] JOYDEEP GHOSH ET AL: "Structural adaptation and generalization in supervised feed-forward networks", JOURNAL OF ARTIFICIAL NEURAL NETWORKS, vol. 1, no. 4, 1 January 1994 (1994-01-01), pages 431 - 458, XP055394848
- [I] YANN LE CUN ET AL: "Handwritten digit recognition with a back-propagation network", ADVANCES IN NEURAL INFORMATION PROCESSING SYSTEMS, vol. 2, 1 January 1990 (1990-01-01), pages 396 - 404, XP055394851
- [A] LIU D ET AL: "Analysis and synthesis of a class of neural networks with sparse interconnections", PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON CIRCUITS AND SYSTEMS. (ISCS). CHICAGO, MAY 3 - 6, 19; [PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON CIRCUITS AND SYSTEMS. (ISCS)], NEW YORK, IEEE, US, vol. -, 3 May 1993 (1993-05-03), pages 2596 - 2599, XP010115740, ISBN: 978-0-7803-1281-4, DOI: 10.1109/ISCAS.1993.394297
- See references of WO 2015118686A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3089081 A1 20161102; EP 3089081 A4 20170920**; CN 105900116 A 20160824; CN 111242300 A 20200605; JP 5937284 B2 20160622; JP WO2015118686 A1 20170323; KR 101878579 B1 20180713; KR 20160117537 A 20161010; US 10796223 B2 20201006; US 2016335536 A1 20161117; WO 2015118686 A1 20150813

DOCDB simple family (application)  
**EP 14882049 A 20140210**; CN 201480073042 A 20140210; CN 202010084242 A 20140210; JP 2014053056 W 20140210; JP 2015561138 A 20140210; KR 20167024009 A 20140210; US 201415110362 A 20140210